

Art Unit: 1648

5
41. (Currently Amended) A diagnostic reagent for the differential detection of a human endogenous retroviral sequence, said diagnostic reagent comprising one or more isolated polynucleotides according to Claim 57.

6
42. (Previously Presented) The diagnostic reagent according to Claim 41, wherein said polynucleotide further comprises a label for detection.

7
43. (Previously Presented) The diagnostic reagent according to Claim 41, wherein said polynucleotide is selected from the group consisting of nucleotides 3065-4390 of SEQ ID NO: 3, nucleotides 6965-9550 of SEQ ID NO: 3, and nucleotides 2502-2865 of SEQ ID NO: 3.

44. – 45. (Canceled)

8
46. (Currently Amended) A method for the differential detection of a human endogenous retroviral sequence, comprising:

(a) contacting a biological sample with at least one diagnostic reagent comprising according to Claim 41, and

(b) detecting a nucleotide sequence-diagnostic reagent interaction; wherein the detection of a nucleotide sequence-diagnostic reagent interaction indicates the presence of the human endogenous retroviral sequence.

9
47. (Currently Amended) A method for the differential detection of a human endogenous retroviral sequence, comprising:

(a) preparing a biological tissue or fluid,

(b) extracting a nucleic acid to be detected,

(c) contacting the nucleic acid with at least one diagnostic reagent according to Claim 41,

Art Unit: 1648

(d) detecting a nucleotide sequence-diagnostic reagent interaction, and
(e) comparing the nucleotide sequences obtained from said detecting with a
polynucleotide selected from the group consisting of:

- i. one of SEQ ID NO: 1, 2, and 3,
- ii. the sequence complementary to one of SEQ ID NO: 1, 2, and 3, and
- iii. a sequence that is the reverse complement to one of SEQ ID NO: 1, 2, and 3;

wherein said comparing identifies an insertion, deletion or mutation between said
sequences compared.

¹⁰
48. (Previously Presented) The method according to Claim ⁹47, wherein said comparing is
by a technique selected from the group consisting of sequencing, Southern blotting, restriction
cleavage, and SSCP.

¹¹
49. (Currently Amended) A method for the differential detection of a human endogenous
retroviral sequence, comprising:

collecting messenger RNAs obtained from a control biological sample and from a sample
collected from patient, and

analyzing qualitatively and/or quantitatively said mRNAs using a diagnostic reagent
according to Claim ⁵41 by a technique selected from the group consisting of *in situ* hybridization,
by dot-blot, Northern blotting, RNase mapping and RT-PCR.

¹²
50. (Previously Presented) A recombinant cloning or expression vector comprising the
polynucleotide according to Claim ¹57.

¹³
51. (Previously Presented) A method of making a diagnostic reagent comprising mixing
the polynucleotide according to Claim ¹57 with a suitable medium.

Art Unit: 1648

52. – 56. (Canceled)

57. (Currently Amended) An isolated polynucleotide sequence selected from the group consisting of:

- e) the polynucleotide sequence of SEQ ID NO: 3;
- f) the complementary sequence to the sequence of a);
- g) the reverse complementary sequence to the sequence of a) or b);
- h) a fragment of a coding region of the sequence of a), wherein said fragment corresponds to a coding frame of at least 14 nucleotides; and
- e) the complementary sequence to the sequence of d).

58. (Currently Amended) The isolated polynucleotide according to Claim 57, wherein said fragment in d) consists of SEQ ID NO: 1 or SEQ ID NO: 2.

59. (Currently Amended) The isolated polynucleotide according to Claim 57, wherein said fragment in d) consists of a sequence encoding the C-terminal portion of enverin wherein said sequence begins at the codon at positions 8749 to 8751 of SEQ ID NO: 3 and contains at least 14 nucleotides.

60. (Currently Amended) The isolated polynucleotide according to Claim 57, wherein said fragment in d) consists of a sequence encoding the C-terminal portion of enverin wherein said sequence begins at the codon at positions 8839 to 8841 of SEQ ID NO: 3 and contains at least 14 nucleotides.